

Designated use structure, NR 102: DRAFT language revision, 4-12-2018

Changes in this section:

- Added section on natural characteristics in the intro. Also added statement that use only applies when there's water.
- Removed section on Naturally Tolerant that was previously part of "Modifications" (removed "Modifications" header because it now only contains Altered).
- Under Macroinvertebrate, added statement on ephemeral streams.
- Removed section on "Other waters": relocated Ephemeral to Macroinvert; relocated Wastewater effluent channel description back into 104. Also removed note that equated ephemeral to diffuse surface water.
- Added (d) Designation of aquatic life uses. This describes using field data, & what to do if there's insufficient field data.

(3) AQUATIC LIFE USE. All surface waters or portions thereof shall be assigned an aquatic life use under this section, and shall be considered suitable for the protection and propagation of a balanced aquatic life community except as in pars. (b) and (c). Waterbodies shall support the growth, development, reproduction, and life cycle of the aquatic life communities of their assigned designated use categories, although they may exhibit moderate changes in structure due to loss of some rare native taxa or shifts in relative abundance. A waterbody with distinct natural characteristics that result in an aquatic life community different from or less diverse than other waters in the same use category may be considered attaining its aquatic life use if it is attaining expected quality. A waterbody's aquatic life use does not apply during periods when there is insufficient water due to natural conditions to support aquatic life.

Note: Examples of waterbodies impacted by natural factors are wetland dominated streams, naturally acidic bog lakes, and ephemeral streams with only small areas of short-term refugia.

(a) General categories.

1. Cold water communities. This subcategory includes surface waters capable of supporting a community of cold water fish and other aquatic life, or serving as a spawning area for cold water fish species. This includes the following:

- a. All waters classified as trout class 1 or 2 under s. NR 1.02 (7).
- b. All waters verified by the department as stratified two-story fishery lakes as defined in s. NR 102.03 (6t).
- c. The Great Lakes as defined in s. NR 102.03 (1r). Great Lakes shall also be considered trout waters.
- d. Other waters with sufficient groundwater or cold surface water input to support a coldwater fish community.

2. Warm water communities. This subcategory includes surface waters capable of supporting a community of warm water or transitional fish and other aquatic life or serving as a spawning area for warm water sport fish.

3. Macroinvertebrate communities. Macroinvertebrate waters have few or no fish due to naturally low or intermittent flows or other natural factors, but a variety of aquatic invertebrates are common, at least seasonally. If an ephemeral stream provides aquatic habitat during certain time periods it is included in this category during those times. Ephemeral streams or channels are those which only carry water for a few days during and after a rainfall or snowmelt event and do not exhibit flow during other periods.

4. Wetland. Wetlands as defined in ch. NR 103.(5) are assigned a wetland aquatic life use if they contain sufficient water to support aquatic life.

Note: The department lists wetlands in the Wisconsin Wetland Inventory, available online at <http://dnr.wi.gov/topic/wetlands/inventory.html> and on the department's online mapping tool, the Surface Water Data Viewer, at <http://dnr.wi.gov/topic/surfacewater/swdvw/>. This may not be a complete list of wetlands.

(b) *Altered waterbodies.* Waterbodies assigned to aquatic life uses in par. (a) may be additionally classified as altered under this paragraph if the department demonstrates through a use attainability analysis in s. NR 102.044 (3) (a) that one or more of a waterbody's biocriteria under subch. III are unattainable due to certain human-caused factors.

Note: Examples of altered waterbodies are straightened streams or concrete-lined channels, if these are not attaining biocriteria and meet the factors in s. NR 102.044 (3) (a). Waterbodies classified as altered under this paragraph exhibit a marked reduction in sensitive taxa, an unbalanced distribution of major taxonomic groups, and reduced complexity of ecosystem structure, as compared to other waterbodies of the same aquatic life use category. Waterbodies in this category are subject to less stringent biocriteria and certain water quality criteria.

(c) Limited waters.

1. Limited forage fish communities. This subcategory includes surface waters of limited capacity and naturally poor water quality or habitat. These surface waters are capable of supporting only a limited community of forage fish and other aquatic life.

2. Limited aquatic life. This subcategory includes surface waters of severely limited capacity and naturally poor water quality or habitat. These surface waters are capable of supporting only a limited community of aquatic life.

Note: Limited forage fish and limited aquatic life are historic use categories that will be phased out over time, and no new waterbodies will be placed into these categories. Until such time that limited forage fish and limited aquatic life waterbodies listed in ss. NR 104.05 to 104.10 are redesignated into the aquatic life use categories in this subsection, the two limited categories in this paragraph will remain in effect for the waterbodies remaining in these categories.

(d) Designation of aquatic life uses. A waterbody shall be designated one of the aquatic life use categories in pars. (a) to (b) based on the aquatic community that it is expected to be capable of supporting. For waters other than those specified as cold water in par. (a) 1 a to c, uses shall be assigned as follows:

1. The designated use shall be based on field data if sufficient field data are available to make the determination.

For streams and rivers, field data based designations shall be made following procedures in the department's "Designated Use Verification Guidance" [ref guidance].

2. If sufficient field data are unavailable to make a use determination, the use shall be designated as follows, except as in subd. 3:

a. Inland lakes and reservoirs shall be designated as warm water community.

b. Streams and rivers shall be designated a use through application of the department's Wisconsin Stream Natural Community Model, Version#, 20## [insert appropriate ref].

Note: The Wisconsin Stream Natural Community Model is described in: Lyons, J. 2008. "Using the Wisconsin Stream Model to Estimate the Potential Natural Community of Wisconsin Streams". Wisconsin Dept. of Natural Resources Fish and Aquatic Life Research Section. Madison, WI.

c. Waterbodies listed as wetlands in the Wisconsin Wetland Inventory shall be designated a wetland aquatic life use if they contain sufficient water to support aquatic life. [does the WI Wetland Inventory have certain classes of wetlands that should be included?]

3. If the procedures in par. (b) would result in a more stringent WQBEL permit limit for an existing discharge, sufficient field data shall be collected to enable the department's designation of a use under par. (a).

Note: Aquatic life designated uses, including results from the Wisconsin Stream Natural Community Model, are available to the public via the department's online mapping tool, the Water Condition Viewer. This can be accessed at: <http://dnr.wi.gov/topic/surfacewater/wcv/>. The department's water quality standards website can be accessed at: <http://dnr.wi.gov/topic/surfacewater/standards.html>. These may also be accessed by visiting the department's home page at <http://dnr.wi.gov/> and searching using key words.